Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the Examiner mailed March 17, 2008. Currently, claims 23 and 28-32 remain pending. Claims 23 and 28-32 have been rejected. Applicants thank the Examiner for pointing out an apparent inconsistency regarding which claims are pending. It is believed that the possible confusion may have resulted from Applicants' assertion that the claims in question, 25 and 34 were patentable as written. That position is now moot in that current claims 23 and 28 were amended to incorporate the elements of claims 25 and 34 respectively. Favorable consideration of the following remarks is respectfully requested.

Claim Rejections - 35 USC § 103

Claims 23 and 28-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Heath (U.S. Patent No. 5,725,570) in view of Bellouard et al. (U.S. Patent No. 6,669,794), hereinafter Bellouard. After careful review, Applicant must respectfully traverse this rejection.

"All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). (MPEP § 2143.03). As discussed in previous responses to Office Actions, nowhere does Heath appear to disclose a "filter leg" or indeed a filter of any kind. Instead, Heath appears to disclose a uniform, superelastic wire useful for the formation of stents. Furthermore, nowhere Bellouard et al. disclose, a filter of any kind or components thereof. The words filter and filtration do not appear in either of the two documents. Therefore, Heath in view of Bellouard et al. does not appear to teach all the claim limitations, as is required to establish a *prima facie* case of obviousness.

Additionally, nowhere does Heath appear to disclose "linear elastic member having at least one localized area of flexibility formed by selectively heating an intermediate portion of the member to a temperature sufficient to induce superelasticity in the member" as required by independent claim 23 or "a linear elastic member having a localized superelastic region; wherein the localized superelastic region is formed by

heating an intermediate portion of the linear elastic member to a temperature sufficient to form the <u>localized superelastic region within the linear elastic member</u>" as required by independent claim 28. The entirety of the filament of Heath appears to be annealed with no localized areas or regions having different properties as contemplated by the pending application. Following the annealing process taught by Heath at column 8 as cited by the Exminer, the wire is said to be entirely superelastic and not linearly elastic and therefore does not appear to provide a "linear elastic member" as required by the pending claims. Applying the localized heating method of Bellouard to an improperly selected starting material does not appear to result in a filter leg or even a wire suitable for use as described in the pending application. Imparting superelasticity to a superelastic wire does not appear to create a linear elastic member with localized regions of superelasticity.

Furthermore, in the Office Action, the Examiner states that Applicants have not "defined the term 'filter leg' in any specific manner such that it defines any specific shape" and further states without support or further comment that "The objects disclosed by Heath appear to be useful as parts of a filter." Addressing the assertions in order, Applicants note that "filter leg" appeared in the context of a medical device patent 17 times in a full text search of the USPTO databases of issued patents and published patent applications performed on April 11, 2008. In each of those documents, it was used as a term of art referring to an elongated wire component of a filter, generally a vena cava filter, formed from wires and attached to a central hub. Although a small number of the documents referred to a mesh or basket formed from by the wires, none appeared to describe a filter leg, or wire suitable as a filter leg, as formed from anything other than a simple wire. Accordingly, the art recognizes the form or "specific shape" of a "filter leg" as that of a wire and that is the form in which the term is used in the pending invention. Although filter leg wires are generally depicted as circular in cross-section, the art does not appear to limit filter legs to that cross-section and some filter legs of the art appear to have rectangular cross-sections.

The "objects disclosed by Heath" are described by Heath in the summary of his invention as "metal in the form of wire or filament or the like is used for constructing tubular medical endoprosthesis such as stents. ... These properties are hard to find in

conventional wires. According to the invention, desired properties are achieved by creating a multiple metal coaxial construction." (Emphasis added.) It appears that sole example of Heath is a wire having a nitinol sheath around a tantalum core formed by a complex forging, rolling, and drawing process followed by annealing the entire filament at 460 °C. Further, Applicant has found that this complex wire formation process is unnecessary in the current invention. Omission of an element with retention of the element's function is an indicia of unobviousness. (MPEP 2144, II., B.) Accordingly, applying the heat treatment of Bellouard to the core/shell superelastic wire of Heath does not appear to render obvious the filter leg of the pending claims 23 and 28. Therefore, for at least these reasons, Applicant respectfully asserts that claims 23 and 28 are patentable over Heath in view of Bellouard and Applicant respectfully requests that the rejections be withdrawn.

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP 2143.03) Accordingly, claims 29-32, which depend from claim 28 and add significant limitations thereto, are believed to be nonobvious and Applicant respectfully requests that the rejections be withdrawn.

Claims 23 and 28-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Muni et al. (U.S. Patent No. 6,375, 629), hereinafter Muni, in view of Bellouard et al. (U.S. Patent No. 6,669,794), hereinafter Bellouard. After careful review, Applicant must respectfully traverse this rejection.

Initially, it should be noted that Muni uses the word filter once and only once at column 3, lines 17-19: "For example, the present inventors contemplate that the core wire of the present invention may be used in occlusive devices functioning as anchorable guide wires or filters." In that context, it appears that Muni only teaches or discloses the use of a core wire having the structure in question in catheters to deliver a filter and does not contemplate a filter or other filter component, much less a filter leg as discussed above. Therefore, Muni in view of Bellouard does not appear to render obvious the filter leg of the pending claims 23 and 28. Therefore, for at least these reasons, Applicant

respectfully asserts that claims 23 and 28 are patentable over Muni in view of Bellouard and Applicant respectfully requests that the rejections be withdrawn.

The Examiner asserts that Muni, at column 7, discloses a core wire that initially has linear elastic properties, but includes a flexible portion which has been heated to obtain superelastic properties. Instead, Muni appears to disclose in the cited column, an embodiment of the invention described in the Summary at column 2, lines 7-28 as a catheter core wire which was initially entirely superelastic which has been subjected to subsequent treatment of a small portion, the distal tip, to impart linear elasticity to the distal tip. This also is stated in the Abstract: "A core wire previously made superelastic is subject to additional processing to remove its superelasticity ...". The pertinent portion of Muni appears to be column 7, lines 47-55 where, once again, a core wire, the material of which has been "processed to exhibit transformational superelasticity" acquires a distal tip having shapability "because of processing as described above, is in a martensitic phase, and thus exhibits only substantially linear elasticity. The wire of Muni appears to be initially superelastic in its entirety and the distal tip becomes linearly elastic as the result of processing. This later passage appears to specify that a variety of processes are suitable for inducing superelasticity into the core wire as a whole prior to the destruction of superelasticity in the distal tip. This can be seen by noting that the distal tip "processing as described above" at line 53 of column 7 refers to col. 6, lines 23-26: "The fourth step of the process shown in FIG. 3D is to remove the superelasticity from the distal end of the core wire by providing an additional cold work at the distal end 30." The first three steps of the process of Fig. 3 of Muni appear to be directed toward forming a shaped, superelastic core wire. As in Heath as discussed above, Muni provides only a superelastic substrate and not a linearly elastic one and therefore does not appear to provide a "linear clastic member" as required by the pending claims. Applying the localized heating method of Bellouard to an improperly selected starting material does not appear to result in a filter leg or even a wire suitable for use as described in the pending application. Imparting superelasticity to a superelastic wire as proposed by the Examiner does not appear to create a linear elastic member with localized regions of superelasticity. Therefore, for at least these reasons, Applicant respectfully asserts that

claims 23 and 28 patentable over Muni in view of Bellouard and Applicant respectfully requests withdrawal of the rejections.

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP 2143.03) Accordingly, claims 29-32, which depend from claim 28 and add significant limitations thereto, are believed to be nonobvious and Applicant respectfully requests that the rejections be withdrawn.

In view of the foregoing, all pending claims are believed to be in a condition for allowance. Reexamination and reconsideration are respectfully requested. Issuance of a Notice of Allowance in due course is anticipated. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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